

4C Captive Screws

Prism series - 4-40, 6-32 and 10-32 thread size



Features

- Designate access points with color
- Color match captive screws to your industrial design
- High strength screw for use with high torque drivers
- Knurled and smooth knobs available

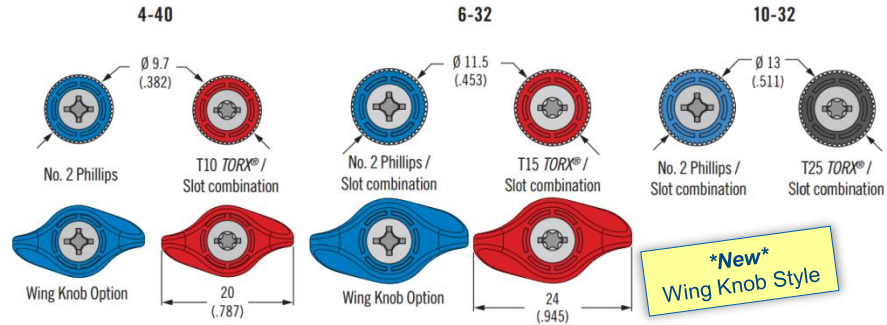
Material

- Knob: PC/ABS
- Screw: Hardened carbon steel, zinc plate, chromate, plus sealer
- Spring: 300 series stainless steel, passivated
- Standoff:
 - Press-in: Carbon steel, zinc plate, chromate, plus sealer
 - PCB: Stainless steel
 - Flare-in and Floating: Aluminum, natural

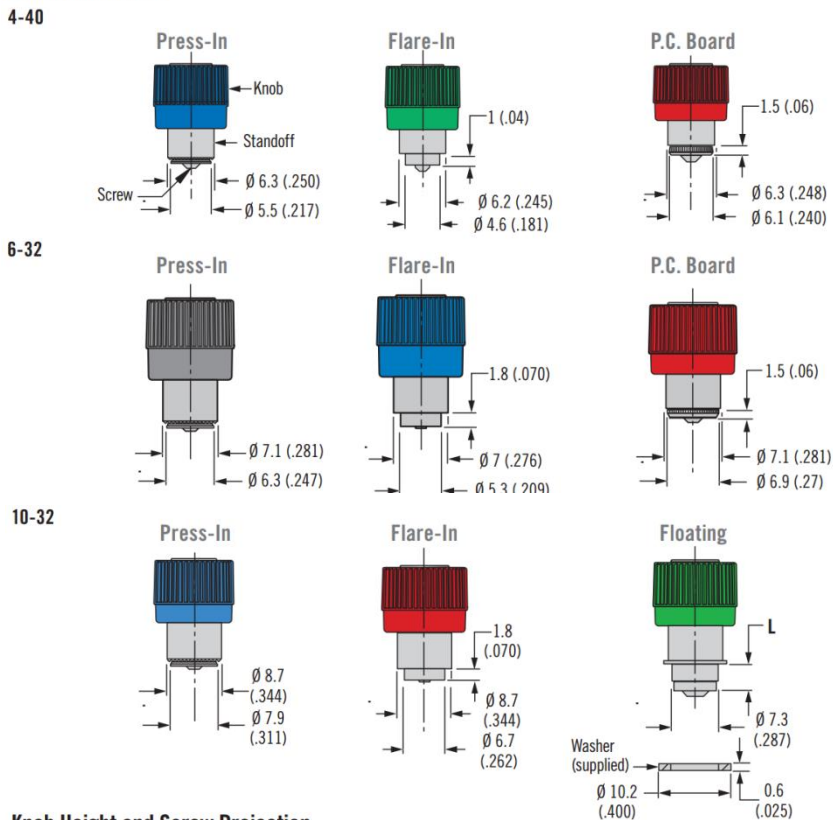
Product Performance

- Flammability Rating: UL94-V0
- Press-in: Maximum panel hardness 170 HV (85 HRB)

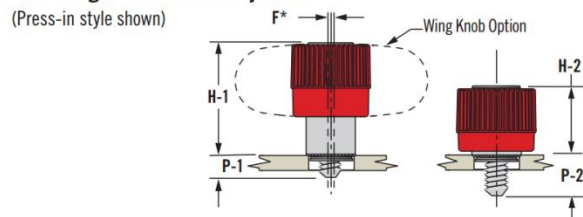
Recess Styles



Installation Styles



Knob Height and Screw Projection



4-40 Thread Size

Installation Style	Outer Panel Dimensions		B	Part Number		Screw Projection Beyond Outer Surface of Panel		Knob Height†		Total Float	Panel Preparation	
	A Min.	A Max.		Phillips Recess	TORX® / Slot Combination	P-1	P-2	H-1	H-2		F*	Ø D
Press-In Style	0.9† (.036)	~	~	4C-PH-04-1P0-K000	4C-TS-04-1P0-K000	0.8 (.03)	3.8 (.15)	11.5 (.45)	8.6 (.34)	0.7 (.03)	5.6 ^{+0.04} _{-0.04}	3.2 ^{+0.2} _{-0.1}
				4C-PH-04-2P0-K000	4C-TS-04-2P0-K000	2.5 (.10)	5.3 (.21)				(.219 ^{+0.003} ₋₀)	(.125 ^{+0.008} _{-0.004})
P.C. Board Style	1.6 (.063)	~	~	4C-PH-04-1B0-K000	4C-TS-04-1B0-K000	1.5 (.06)	3.8 (.15)	10.9 (.43)	8.5 (.33)	0.7 (.03)	5.6 ^{+0.1} _{-0.05}	3.2 ^{+0.2} _{-0.1}
				4C-PH-04-2B0-K000	4C-TS-04-2B0-K000	3.3 (.13)	5.5 (.22)				(.220 ^{+0.004} _{-0.002})	(.220 ^{+0.008} _{-0.004})
Flare-In Style	0.8 (.031)	1.5 (.059)	0.4 (.016)	4C-PH-04-1F1-K000	4C-TS-04-1F1-K000	0.8 (.03)	3.7 (.15)	11.5 (.45)	8.6 (.34)	0.7 (.03)	4.8 ^{+0.08} _{-0.005}	3.0 ^{+0.2} _{-0.1}
				4C-PH-04-2F1-K000	4C-TS-04-2F1-K000	2.5 (.10)	5.4 (.21)				(.187 ^{+0.005} _{-0.000})	(.125 ^{+0.008} _{-0.004})

6-32 Thread Size

Installation Style	Outer Panel Dimensions		B	Part Number		Screw Projection Beyond Outer Surface of Panel		Knob Height†		Total Float	Panel Preparation	
	A Min.	A Max.		Phillips / Slot Combination	TORX® / Slot Combination	P-1	P-2	H-1	H-2		F*	Ø D
Press-In Style	0.9† (.036)	~	~	4C-PS-06-1P0-K000	4C-TS-06-1P0-K000	0.7 (.03)	5 (.20)	15.5 (.61)	11.3 (.44)	0.7 (.03)	6.4 ^{+0.03} _{-0.05}	3.7 ^{+0.2} _{-0.1}
				4C-PS-06-2P0-K000	4C-TS-06-2P0-K000	2.3 (.09)	6.6 (.26)				(.250 ^{+0.003} ₋₀)	(.146 ^{+0.008} _{-0.004})
P.C. Board Style	1.5 (.06)	~	~	4C-PS-06-1B0-K000	4C-TS-06-1B0-K000	1.7 (.07)	6.2 (.25)	14.5 (.57)	10 (.39)	0.7 (.03)	6.4 ± 0.1 (.252 ± .004)	3.7 ^{+0.2} _{-0.1} (.146 ^{+0.008} _{-0.004})
Flare-In Style	1.5 (.059)	3.2 (.125)	0.4 (.016)	4C-PS-06-1F1-K000	4C-TS-06-1F1-K000	0.8 (.03)	5 (.20)	15.5 (.61)	11.3 (.44)	0.7 (.03)	5.4 ^{+0.1} _{-0.005}	3.7 ^{+0.2} _{-0.1}
				4C-PS-06-2F1-K000	4C-TS-06-2F1-K000	2.3 (.09)	6.6 (.26)				(.213 ^{+0.005} _{-0.000})	(.146 ^{+0.008} _{-0.004})

10-32 Thread Size

Installation Style	Outer Panel Dimensions		B	L	Part Number		Screw Projection Beyond Outer Surface of Panel		Knob Height†		Total Float	Panel Preparation		
	A Min.	A Max.			Phillips / Slot Combination	TORX® / Slot Combination	P-1	P-2	H-1	H-2		F*	Ø D	Ø Z
Press-In Style	0.9† (.036)	~	~	~	4C-PS-10-1P0-K000	4C-TS-10-1P0-K000	0.5 (.02)	5.6 (.22)	11.3 (.45)	0.6 (.02)	0.6 (.02)	8 ⁻⁰ _{-0.08}	5.2 ^{+0.2} _{-0.1}	
					4C-PS-10-2P0-K000	4C-TS-10-2P0-K000	2 (.08)	7.1 (.28)				(.315 ⁺⁰ _{-0.003})	(.205 ^{+0.008} _{-0.004})	
Flare-In Style	1.5 (.058)	3.2 (.125)	0.4 (.016)	1.8 (.070)	4C-PS-10-1F1-K000	4C-TS-10-1F1-K000	0.6 (.02)	5.6 (.22)	11.3 (.45)	0.6 (.02)	0.6 (.02)	6.8 ^{+0.08} _{-0.04}	4.9 ^{+0.05} ₋₀	
					4C-PS-10-2F1-K000	4C-TS-10-2F1-K000	2.1 (.08)	7.1 (.28)				(.266 ^{+0.009} ₋₀)	(.191 ^{+0.002} ₋₀)	
Floating Style	0.8 (.031)	1.6 (.063)	3.1 (.122)	4 (.158)	4C-PS-10-3T2-K000	4C-TS-10-3T2-K000	3.8 (.15)	8.8 (.35)	16.3 (.64)	11.2 (.44)	2.3 (.09)	0.6 (.02)	8.8 ^{+0.08} _{-0.03}	~
					4C-PS-10-4T2-K000	4C-TS-10-4T2-K000	5.4 (.21)	10.4 (.41)					(.346 ^{+0.003} _{-0.001})	
					4C-PS-10-3T3-K000	4C-TS-10-3T3-K000	3.8 (.15)	8.8 (.35)						
	1.6 (.063)	2.4 (.094)	3.9 (.153)	4.8 (.190)	4C-PS-10-4T3-K000	4C-TS-10-4T3-K000	5.4 (.21)	10.4 (.41)						



000
Black



008
Blue



013
Red



014
Green



Your Color
Contact Gripwell

Notes

- *F indicates the maximum float in the unfastened position.
- † For panels thinner than 0.9, contact Gripwell sales

Part selection options

- To indicate color, change the last three digits of the part number
- For knob style, K = knurled and N = smooth. For smooth knob change K to N, example:
 - 4C-PS-06-1P0-K000, black, knurled
 - 4C-PS-06-1P0-N013, red, smooth

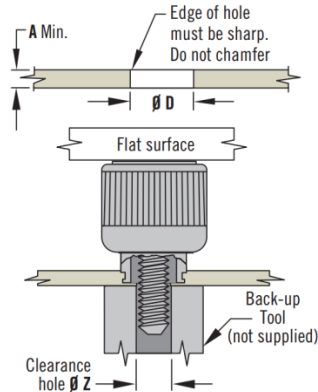
Wing Knob option:

- For 4-40 and 6-32, Press-in and Flare-in only
- To indicate Wing Knob option, change K to W of the part number, example:
 - 4C-PS-06-1P0-K000, Round Knob
 - 4C-PS-06-1P0-W000, Wing Knob

47/4C Captive Screws

Panel preparation and installation

Press-In Style



See page 543
for additional
installation
guidelines

Notes: For use in material hardnesses RB85 or less, such as low carbon steels that are half hard or softer, stainless steels in the annealed condition and aluminum.

Thread Size	ϕD	Clearance Hole ϕZ <small>+0.2 / +0.008 -0.1 / -.004</small>
M3 or 4-40	5.6 ^{+0.03} _{-0.05} (.219 ^{+0.003} ₋₀)	3.2 (.125)
M3.5 or 6-32	6.4 ^{+0.03} _{-0.05} (.250 ^{+0.003} ₋₀)	3.7 (.146)
M4 or 8-32	8 ⁺⁰ _{-0.08} (.315 ⁺⁰ _{-0.003})	4.4 (.173)
M5 or 10-32	8 ⁺⁰ _{-0.08} (.315 ⁺⁰ _{-0.003})	5.2 (.205)
M6 or 1/4-20	9.5 ^{+0.1} ₋₀ (.375 ^{+0.003} ₋₀)	6.2 (.260)

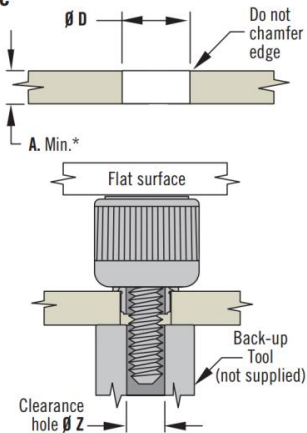
Installation Notes

1. Prepare panel as shown. Top edge of hole should be sharp.
2. Press captive screw into panel until ferrule is installed as shown

Notes

- Installation closer to the panel edge requires a fixture to constrain the panel edges
- Recommended minimum distance from edge of panel to centerline of hole is $1.5 \times \phi D$

P.C. Board Style



Thread Size	ϕD	Clearance Hole ϕZ <small>+0.2 / +0.008 -0.1 / -.004</small>
M3 or 4-40	5.6 ^{+0.1} _{-0.05} (.219 ^{+0.004} _{-0.002})	3.2 (.125)
M3.5 or 6-32	6.4 ± 1 (.252 ± .004)	3.7 (.146)

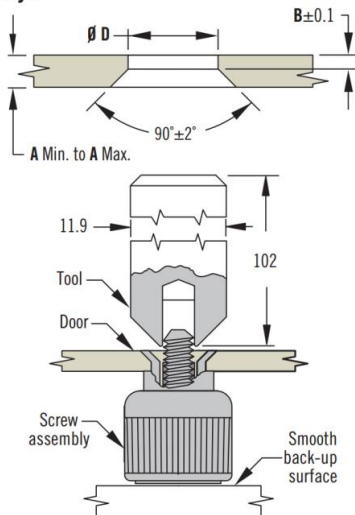
Installation Notes

1. Prepare panel as shown
2. Use pilot lead-in to guide assembly into hole and press knurl into panel until ferrule shoulder contacts surface

Notes

- Strength data based on drilled holes in G-10 P.C. Board
- Pullout force: 360 N
- Side load against unfastened knob: 200 N

Flare-In Style



Thread Size	ϕD	Tool Part Number
M3 or 4-40	4.8 ^{+0.08} _{-0.05} (.187 ^{+0.005} ₋₀)	47-104
M3.5 or 6-32	5.4 ^{+0.1} ₋₀ (.213 ^{+0.005} ₋₀)	47-106
M4 or 8-32	6.8 ^{+0.08} _{-0.04} (.266 ^{+0.005} ₋₀)	47-108
10-32	6.8 ^{+0.08} _{-0.04} (.266 ^{+0.005} ₋₀)	47-110
M5	6.8 ^{+0.08} _{-0.04} (.266 ^{+0.005} ₋₀)	47-115
M6 or 1/4-20	8.2 ^{+0.1} ₋₀ (.323 ^{+0.005} ₋₀)	47-125

Installation Notes

1. Prepare panel as shown
2. Install tool in suitable press. Only LIGHT pressure will be required
3. Insert screw assembly into prepared hole in panel
4. Place work under press, center tool over screw thread and flare ferrule into counter-sink in panel. Use LIGHT pressure

Notes

- Installation force: 1,600 N to 2,500 N
- Installation force depends on thread size

Installation Notes

- **Panel preparation 1:**
 - Requires space between inner and outer panels.
 - Specify the fastener for panel thickness A to fall between the range A Min. to A Max.: gap = B - A outer panel thickness
- **Panel preparation 2:**
 - Counter bore the panel (B = Min. panel thickness) to a thickness (A) between the range of A Min. and A Max.
- Minimum bore depth = panel thickness - A Max.
- For gap = Ø, panel thickness must be ≥ to B value (before counterbore) for the given part number

Notes

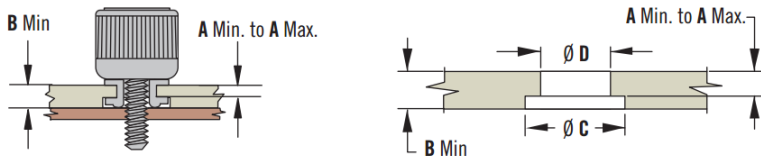
- B and A Max. values are provided in the corresponding fastener selection tables for each part number
- If holes are drilled, top edge of hole should be chamfered

Floating Style

Panel preparation 1

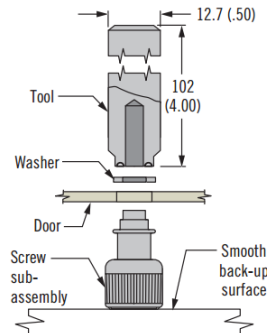


Panel preparation 2



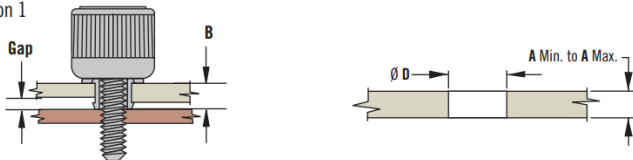
Thread Size	Tool Part Number
M3 or 4-40	47-04
M3.5 or 6-32	47-06
M4 or 8-32	47-08
M5	47-05
10-32	47-10
M6 or 1/4-20	47-25

Thread Size	Ø D	Counterbore Min. Ø C
M3 or 4-40	6.4 (.250)	9.4 (.375)
M3.5 or 6-32	7.2 (.283)	10.5 (.413)
M4 or 8-32	8.8 (.346)	12 (.469)
M5 or 10-32	8.8 (.346)	12 (.469)
M6 or 1/4-20	10.5 (.413)	13.5 (.531)

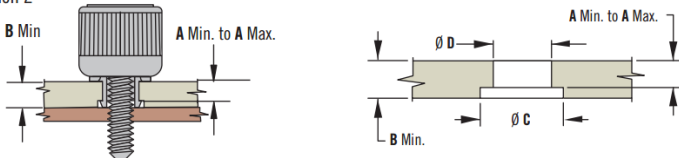


Snap-In Style

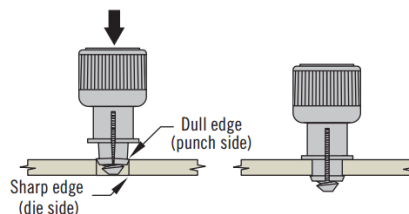
Panel preparation 1



Panel preparation 2



Thread Size	Ø D	Counterbore Min. Ø C
M3.5 or 6-32	6.4 (.250)	7.5 (.295)
M4 or 8-32	6.4 (.250)	7.5 (.295)
M5 or 10-32	6.4 (.250)	7.5 (.295)



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